

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

5. (currently amended) A method for exposing an image sensor, comprising:
taking multiple color data readings with ~~more than one~~ a series of sensing elements ~~of an array~~ in one collecting location during a single exposure, wherein the taking comprises directing light successively to the sensing elements of the series of sensing elements within one exposure, the directing via reflective optics;
associating the one collecting location with a pixel position in an image to be portrayed;
and
determining a color value for the pixel position in the image based on the multiple color data readings.
6. (currently amended) The method of claim 1, further comprising:
determining a sensing element of the ~~more than one~~ series of sensing elements is defective, wherein the sensing element is associated with a color; and
~~positioning the array~~ redirecting light to align a non-defective sensing element of the ~~more than one~~ series of sensing elements with the one collecting location, wherein the non-defective sensing element is associated with the color.
7. (original) The method of claim 1, wherein taking comprises taking multiple color data readings with more than one sensing elements, wherein the more than one sensing elements comprise color filters selected from a group of color filters comprising red, green, blue, cyan, orange, yellow, magenta, or clear.
4. – 6. (canceled)
5. (currently amended) The method of claim 1, wherein determining a color value comprises calculating the color value with at least one of the multiple color data readings.

5. (currently amended) A machine-~~accessible~~readable medium ~~encoded with~~containing instructions capable of being~~[[,]]~~~~which~~~~when~~ executed by a computer machine, cause said machine to perform operations, comprising:
- taking multiple color data readings with ~~more than one~~ a series of sensing elements ~~of an array~~ in one collecting location during a single exposure, wherein the taking comprises directing light successively to the sensing elements of the series of sensing elements within one exposure, the directing via reflective optics;
- associating the one collecting location with a pixel position in an image to be portrayed;
- and
- determining a color value for the pixel position in the image based on the multiple color data readings.
9. (currently amended) The machine-~~accessible~~readable medium of claim 8, wherein the operations further comprise
- determining a sensing element of the ~~more than one~~ series of sensing elements is defective, wherein the sensing element is associated with a color; and
- ~~positioning the array~~ redirecting light to align a non-defective sensing element of the ~~more than one~~ series of sensing elements with the one collecting location, wherein the non-defective sensing element is associated with the color.
5. (currently amended) The machine-~~accessible~~readable medium of claim 8, wherein taking comprises taking multiple color data readings with ~~more than one~~ the series of sensing elements, wherein the ~~more than one~~ series of sensing elements comprise color filters selected from a group of color filters comprising red, green, blue, cyan, orange, yellow, magenta, or clear.
- 11.-12. (canceled)
5. (original) A device, comprising:

a series of sensing elements, adapted to collect multiple color data readings to determine a color value for a pixel in an image and reflective optics to redirect light to the series of sensing elements successively within one exposure.

6. (original) The device of claim 13, wherein the series of sensing elements comprises a first element sensitive to red light, a second element sensitive to blue light, and a third element sensitive to green light.
7. (original) The device of claim 13, wherein the reflective optics comprise a digital micromirror device and control circuitry to redirect the light to the series of sensing elements successively within the one exposure.
8. (original) The device of claim 13, wherein the reflective optics include a mirror to scan light to the series of sensing elements.
9. (currently amended) A system, comprising:
a plurality of sensing elements, comprising light sensors covered with colored filters to receive light and to generate filtered readings of data of the light;
a motor coupled to the plurality of light sensors, the motor configured to move the plurality of light sensors;
moving logic coupled with the motor to move more than one of the plurality of light sensors in succession into ~~the~~ a single collecting location to take the filtered readings;
logic to determine that a light sensor of the plurality of light sensors is defective, the light sensor associated with a color, wherein the moving logic is able to position the plurality of light sensors to align with the single collecting location a non-defective light sensor of the plurality of light sensors, the non-defective light sensor associated with the color;

a memory to associate the filtered readings from a collecting location with a pixel position in an image and to store the association into a location in memory; and
a calculator to calculate a color value based upon the filtered readings from the plurality of light sensors.

10. (canceled)
11. (currently amended) The system of claim 17, wherein the plurality of light sensors comprise the plurality of light sensors covered with colored filters, the colored filters being selected from a group of color filters comprising red, green, blue, cyan, orange, yellow, magenta, or clear.
12. (original) The system of claim 17, wherein the moving logic is configured to move the plurality of light sensors to position another light sensor of the plurality of light sensors into the single collecting location to obtain the filtered readings of color data values in the single collecting location.
13. (original) The system of claim 20, wherein the motor comprises a piezoelectric motor.
5. (new) The method of claim 1, wherein the directing comprises directing light to the series of sensing elements successively within one exposure, the directing via a digital micromirror and control circuitry.
6. (new) The method of claim 1, wherein:
the taking comprises taking multiple color data readings with a series of sensing elements of an array, the array comprising an image sensor;
the array contains extra rows and columns of sensing elements forming an outline around the edges of the array; and

the taking comprises taking fewer data readings during an exposure with one or more sensing elements of the outline than with sensing elements of the interior of the array.

5. (new) The method of claim 23, further comprising:
determining a sensing element of the series of sensing elements is defective,
wherein the sensing element is associated with a color; and
redirecting light to align a non-defective sensing element of the series of sensing elements with the one collecting location, wherein the non-defective sensing element is associated with the color.
5. (new) The machine-accessible medium of claim 8, wherein the directing comprises directing light to the series of sensing elements successively within one exposure, the directing via a digital micromirror and control circuitry.